AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

- 1. (Currently amended) A cassette for cell screening, comprising
 - (a) a base having a surface, wherein the surface contains a non-uniform micropatterned chemical array comprising multiple cell binding sites, and wherein a cell binding site comprises a well; and
 - (b) a fluid delivery system for delivering a combinatorial of reagents to the wells; wherein said fluid delivery system comprises a chamber that mates with the base, wherein the chamber comprises:
 - (i) a plurality of domains matching the wells on the surface of the base; and
 - (ii) microfluidic channels that supply fluid to the domains.

2-8. (Canceled)

- 9. (Previously presented) The cassette of claim 1, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.
- 10. (Previously presented) The cassette of claim 1, wherein the chamber further comprises microfluidic channels that remove excess fluid from the domains.
- 11. (Previously presented) The cassette of claim 1, wherein each individual microfluidic channel supplies fluid to a single domain, to provide separate fluid flow to each domain.
- 12. (Previously presented) The cassette of claim 1, further comprising a plug between the end of the microfluidic channel and the domains.
- 13. (Previously presented) The cassette of claim 1, wherein a microfluidic channel extends from each domain to an edge of the chamber.
- 14. (Previously presented) The cassette of claim 1, further comprising an array of cells on the wells.

- 15. (Previously presented) The cassette of claim 1, wherein the wells in total comprise cell binding sites for more than one cell type.
- 16. (Currently amended) The cassette of claim 15, further comprising a controlled selectively bound array of cell types on the wells, wherein the cell type on an individual well is dependent upon the cell binding specificity of the cell binding sites in the well.
- 17. (Currently amended) A cassette for cell screening, comprising:
 - (a) a base having a surface, wherein the surface contains a non-uniform micropatterned chemical array comprising multiple cell binding sites for interaction with different cell types, and wherein the cell binding sites comprise wells, wherein the wells in total comprise cell binding sites for more than one cell type;
 - (b) a <u>controlled selectively bound</u> array of cell types on the wells, wherein the cell type on an individual well is dependent upon the cell binding specificity of the cell binding sites in the well; and
 - (c) a fluid delivery system for delivering a combinatorial of reagents to the eontrolled selectively bound array of cell types, wherein said fluid delivery system comprises a chamber that mates with the base, wherein the chamber comprises:
 - (i) a plurality of domains matching the wells on the surface of the base; and
 - (ii) microfluidic channels that supply fluid to the domains.
- 18. (Previously presented) The cassette of claim 17, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.
- 19. (Previously presented) The cassette of claim 17, wherein the chamber further comprises microfluidic channels that remove excess fluid from the domains.
- 20. (Previously presented) The cassette of claim 17, wherein each individual microfluidic channel supplies fluid to a single domain, to provide separate fluid flow to each domain.
- 21. (Previously presented) The cassette of claim 17, further comprising a plug between the end of the microfluidic channel and the domains.

22. (Previously presented) The cassette of claim 17, wherein a microfluidic channel extends from each domain to an edge of the chamber.